12
MAR
10

PSYCHO STYRENE

The Journal of SCI-FI, Fantasy, & Horror Modelling

Budget Set Building

Directing Stop Motion

Stop Motion Special

Build Your Own Brass Armature

Puppet Building

alter eddie

Editorial

The Staff

Editor in chief
GeekBot

Copy Editor
Vickie Miles

Graphics & Layout
Darren Llewellyn

Contacts

Editorial Staff
GeekBot@PsychoStyrene

Submissions
Submissions@PsychoStyrene

Readers Gallery
ReadersGallery@
PsychoStyrene

Publisher
Admin@
RetroModernModels

Sales/Advertising
Sales@psychostyrene.co.uk

Graphic Design
Graphics@
RetroModernModels

All Characters, their likenesses and their related titles and logos are ™ and © of their respective owners. All content of this publication is property of Psycho Styrene and its publisher Retro Modern Models unless otherwise stated and may not be used without permission of us or the author. All views expressed in the articles printed in this publication are those of the author, and are not nessacarilly those of the publication, publisher, or any related enterprises.

Data Burst

By Geek Bot

Stop Motion Special

Hi Guys and welcome to Issue 12 and we decided to go for a special this Issue and packed it full of Stop motion articles including a very cool article on a fantasy project voices by some well known actors

we have also hopefully addressed all of the issues with the online sales and if you are reading this I hope that's true.

If there is anything you would like to see in here drop me a line here at Readers Comments or here on the forum

Well that's my rave over for this issue we have some good articles in here this issue so enjoy the mag and we will be back to our regular transmission in 60 days☺

Front Cover By Charlie Norris & Darren Llewellyn
Rear Cover By Martin Bower

This Issue

CONTENTS

Contents

Data Burst	**2**
MYTHIC JOURNEYS	**4**
Making A Ball and Socket Armature	**9**
Clark Schaffer Interview	**13**
Pro Sets on a Budget	**18**
CGI Sets – A Study	**27**
Resources	**33**
Pin-Up	**35**

Showcase

MYTHIC JOURNEYS
Producing and Directing Stop-Motion

by Steven & Whitney Boe

The technique of working with puppets as compared to live actors is very similar. They both have their tendencies to fall apart if you handle them poorly. They both need makeup and touch-ups to look their best. They both require a gentle hand to nudge them in the direction in which you want them to go and of course, you have to be careful where you put your hands. Because in the end you want to see the character on screen, not the director's plodding touch.

After completing the documentary production phase of our film **Mythic Journeys**, we realized that we couldn't have a movie about myth and not tell a myth. We began searching for a story, we were not looking for one that would just fit the theme of the film or serve as a framework for the structure we had created, but a story that would be visually appealing and entertaining to the audience, after all that is the most important part of any film. With this concept in mind, we created the world of **The**

Bone Orchard, a 30-minute stop-motion animated segment of our documentary, which was based on the 1000-year-old Indian myth, Vikram & Betal.

The three main puppets used in the film have been designed and created by the amazing artist Brian & Wendy Froud (Dark Crystal, Labyrinth). We sent them the script and when they asked us what we were looking for we said, "Just do what you do" that was the best thing we could have said, because when you trust your artists to be creative you can really get some incredible results.

Our Lead Animator Michael Granberry (www.RedHatchetFilms.com) was the first one on board and the person who suggested animating **The Bone Orchard** in stop-motion. After thinking about it, we liked the tactility of puppets, it gave that sense that the audience could reach out and touch the characters on screen. As producers and directors, this project was a challenge from the beginning. Although we have a background in motion graphics, we had never dealt with animation in any form, so there was a bit of a learning curve for us. The basic process of stop-motion is readily understandable: "You move the puppet, you take the picture, you move the puppet, you take the picture, over and

Mark Hamill (The Corpse)
recording his voice for the stop-motion animated section of the documentary.
NOTE: We are not calling Mark a corpse, he is simply playing the voice of The Corpse character.
MYTHIC JOURNEYS
Written, Produced and Directed by Steven Boe & Whitney Boe.
© 2007 Imaginal Cells FilmWorks www.ImaginalCellsInc.com

Tim Curry recording the voice of The King for the stop-motion animated section of the documentary.
MYTHIC JOURNEYS
Written, Produced and Directed by Steven Boe & Whitney Boe.
© 2007 Imaginal Cells FilmWorks www.ImaginalCellsInc.com

Technical Details

Camera: Nikon D300 Still Camera
3-4k Jpeg (Raw took too long to load into the computer)
Animation: 30 fps shot mostly on the 1s to give it a smooth a look as possible
Software: Dragon Stop-Motion
Length: 28 minutes within a 97 minute long documentary.
Edited: Processed in After Effects and Motion and edited in Final Cut Pro
Format: Down sized to HD and to SD
Sound: 5.1 Surround.
Release: In select US theatres now. DVD release April 2010
Company Imaginal Cells FilmWorks, Los Angeles, www.ImaginalCellsInc.com
Copyright 2010 ICF, Inc.

over and over again" okay, tedious but easy, right? well that was the thought anyway. So it was with confidence that we started the first day of shooting **The Bone Orchard** and then our dreams of being stop-motion animators died within the first 30 minutes of production when our naiveté about the complexities of stop-motion animation exposed itself.

In a more serious moment actor Lance Henriksen (The Sorcerer) poses for the camera while recording his voice for the stop-motion animated section of the documentary.
NOTE: Lance is the one with the pencil in his mouth.
MYTHIC JOURNEYS
Written, Produced and Directed by Steven Boe & Whitney Boe.
© 2007 Imaginal Cells FilmWorks www.ImaginalCellsInc.com

What we scheduled and budgeted for 3 months actually took 9 months to complete. Making our "low budget little art project" turned into a "masterpiece of epic proportions" all because of the artists. It was their fault entirely! It all started when we received the puppets from Brian & Wendy. The puppets were so amazing, detailed, and gorgeous that they completely surpassed the quality of our original concept so we had to rework our set design. Then of course, we needed to raise the bar again with the caliber of voice-over talent that is when we brought in Tim Curry, Mark Hamill and Lance Henriksen. So each gain we received in production value forced us to improve upon every other aspect of the film because you are only as good as your

weakest link.

Michael Granberry set the bar very high and we just assumed everyone would be able to do what he did.

We knew the style of the animation had to match this now "masterful" level and as lead animator,

Yeah, that was not as easy as you would think. We were surprised at the difference in quality between animators but we insisted on the highest quality of animation possible (one of the reasons it took so long – we often shot on the 1's instead of 2's) and if an animator couldn't give that to us we wouldn't hire them. We would discuss the shot with the animators, block the scene with the main beats and emotions just as we would with actors, and then let them create the shot. We did not want to have to direct every

specific movement of the puppets, the props, the costumes, etc. we think a good director points the talent towards their objective and then stands back and let's them create the magic if we don't trust our artists why did we hire them in the first place?

It was about 6 months into the 9-month shoot before we felt comfortable with what we were doing as stop-motion directors. Prior to that, we relied heavily upon the talent of the animators, being at the mercy of their expertise, which is not necessarily a bad thing. As we went along, we really began to understand the process of stop-motion as well as how to communicate our ideas more clearly, it was then our vision of the final project began to come into focus.

So we when are asked what kind of advice we would give to any young artist it would be to remember the following:

1. If you are not passionate about what your doing ask yourself why are you doing it in the first place.
2. Work with artists you trust and then show them that respect by letting them do what they do well.
3. You are only as good as your weakest link.
4. Surround yourself with talent who is better than you are. It challenges you to grow and in the end only makes, you look better.
5. Your set is not a democracy it is a dictatorship. The tone of your set starts at the top and trickles down.

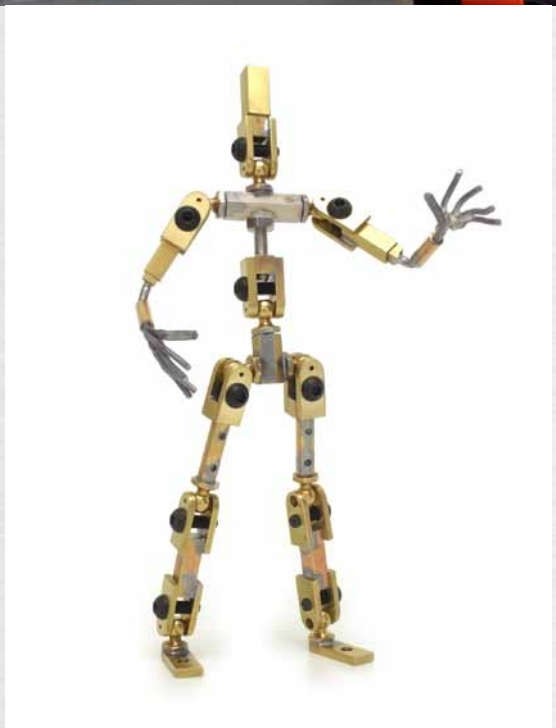
Various Shots – Mythic Journeys Photo Page: http://imaginalcellsinc.com/Pages/MythicJourneysPhotos.htm

Press Kit: http://imaginalcellsinc.com/Pages/MythicJourneysPress.htm

Making A Ball and Socket Armature

by Tetsu Kawamura

The Japanese love the art of stop motion animation. As a result, many young people are making animated films using this technique, most of these animators tend to uses aluminium wire for puppet's armature. This down to two main factors the first is that professionally made ball and socket armatures can be incredibly expensive to buy while a wire armature is reasonably cheap and easy to make. Secondly, a great many animators do not really know how to make one for themselves or they think you need a lot of very expensive machining tools.

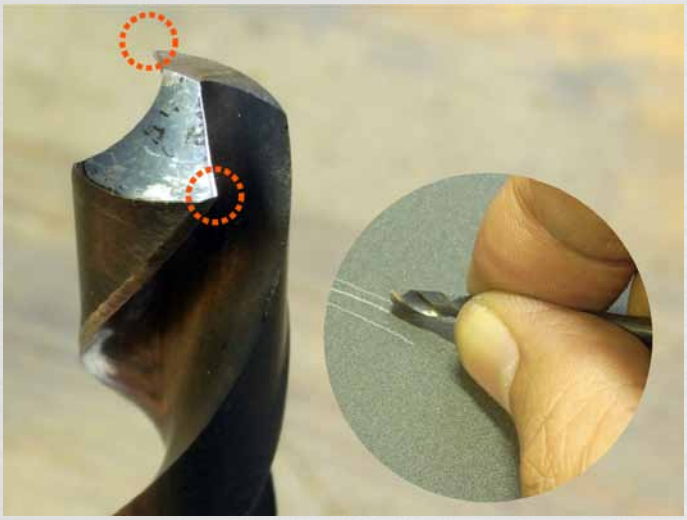


It is Because of this fact that I decided to write a book about ball & socket armature that are able to made easily from our book. Below is an outline on how to make one. You can see more examples of the armatures from our book on or site.

To construct this armature we will be using brass as it is sturdy yet easy to cut and is readily available from many model suppliers. Rather than relay on expensive machines to create the ball part of the armature we will be using brass ball joints from

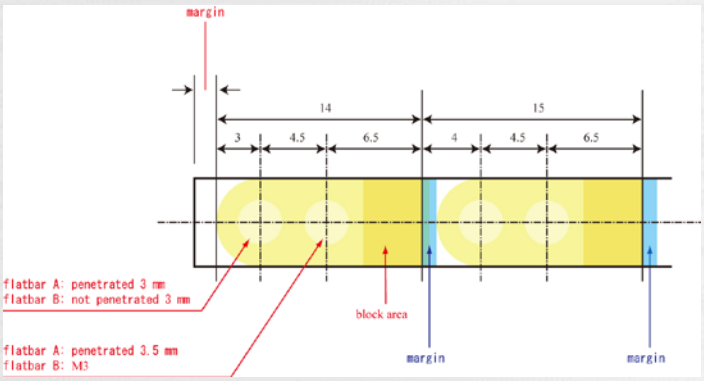
radio control car spares. Since the part is made of brass, it is easy to attach to the rest of the parts and is idea for the project.

So what else do you need to build the goliath of the stop-motion world? The first thing we need is some “flatbar” for the socket plate, some brass tube is also needed as it is used for the length between the joints. The first thing we need to do is Make the speed of the drilling machine as slow as we can, a drill bit is intentionally made not to cut easily. I have found it a good idea to “cut” down the part of the

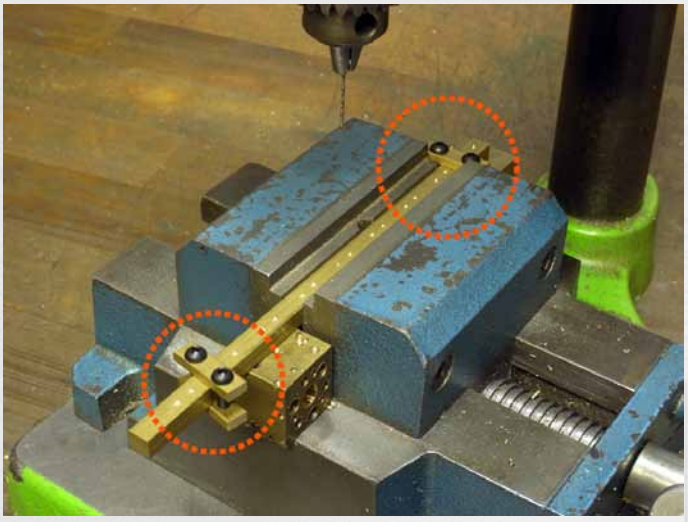


drill bit shown in the photograph with the sandpaper as a new drill bit often cuts too much and can be dangerous but this is not necessary.

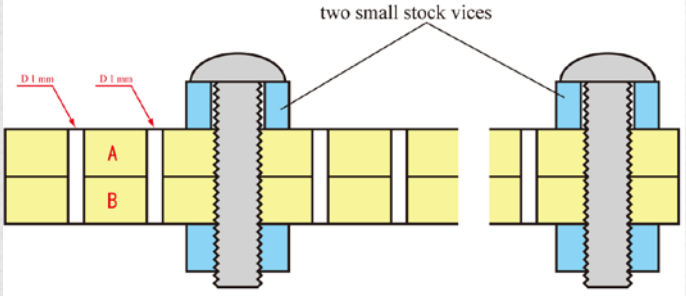
For ease of explanation for the article, I have named to two “flatbars” as “A”, and “B”. Draw the line down the centre of the Brass “flatbar” on A as shown in the blueprint. This is done to help with the layout and drilling that we will be doing next, now “A” and “B” are combined, then clamped securely in the vice. In addition, a small clamp type vice that



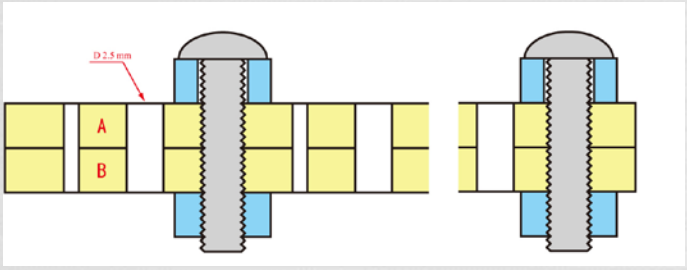
I have made for this purpose are clamped to both “A” and “B” to stop them from moving while we are working with them. I make the two small stock vices simply by drilling out four bits of brass and running a small bolt through them to enable them to be tightened down on the “flatbar”.



You need to carryout this step before you go any further as it is dangerous if the two strips come apart while drilling them. Now we can use the marked out strip as shown earlier to make the armature. The first step is to drill out the holes needed for the armature using a 1mm drill bit, once

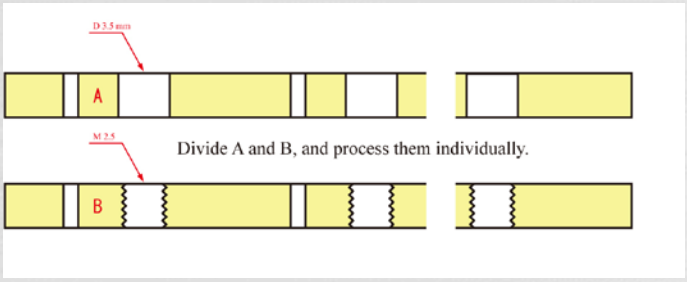


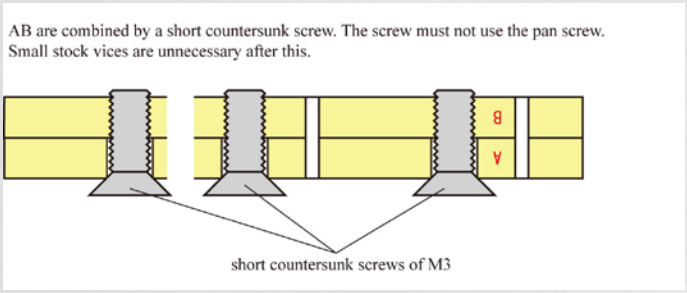
this is done you need to re-drill all the holes for the bolts with a 2.5mm for the clearance as shown in



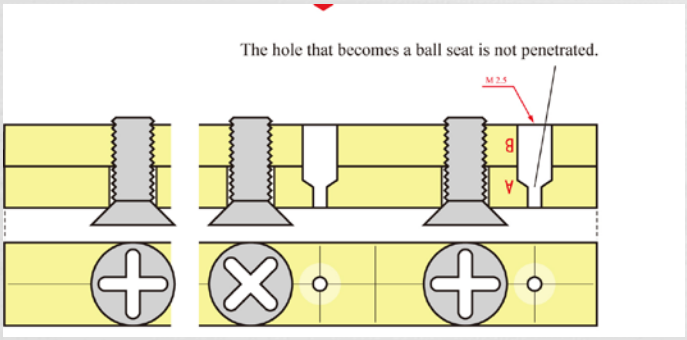
the diagram. The reason for the two lots of drilling is that trying to drill a large hole in even soft metal is very hard, and causes strain on the tools and the drill bit, and bits of shattered drill bit fly around your shop is not a good idea.

Separate “A” and “B” re-drill the 2.5mm hole out with a 3.5mm bit in Part “A” and tap out “B”

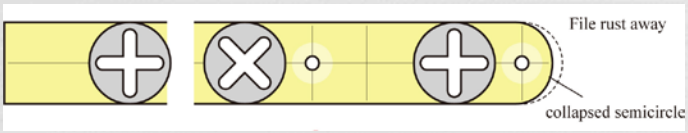



AB are combined by a short countersunk screw. The screw must not use the pan screw.
Small stock vices are unnecessary after this.
B
A
short countersunk screws of M3

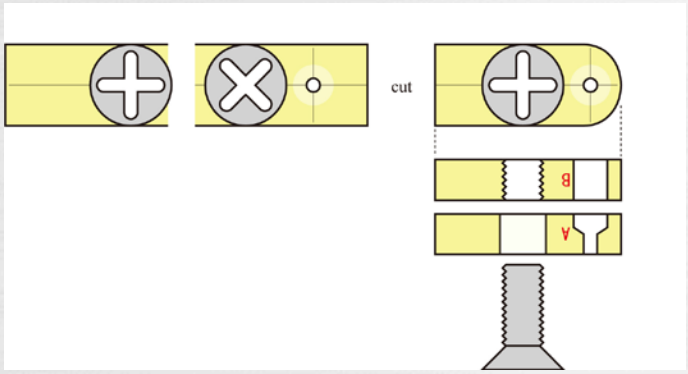
using an M2.5 tap. “A” and “B” are then combined with a short countersunk screw. Now drill out the hole for the ball joint using an M2.5 Diameter bit but be careful not to go into the “A” side as this is used



as the seat for the ball joint. Next you need to round

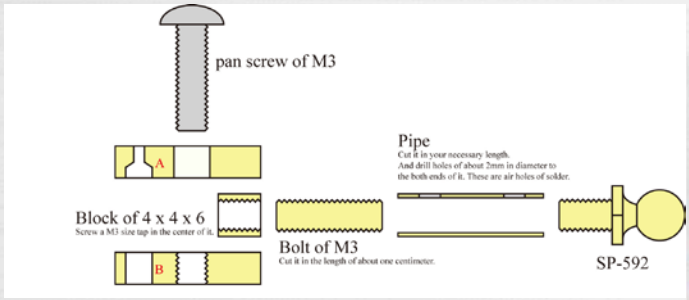


off the edges of the joint as shown in the diagram,

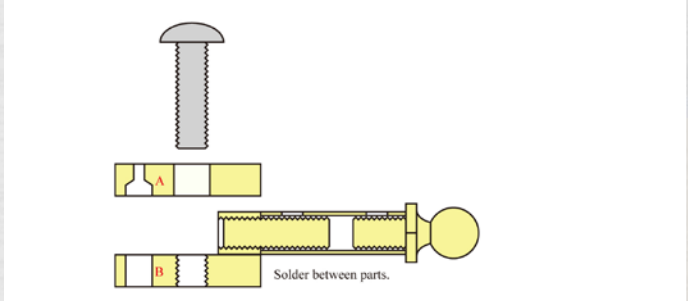


then cut the parts to their finished length.

Now with all the parts cut down to size we can prepare the parts for soldering I recommend you to use liquid flux and the gas torch for soldering. The first step is to solder the ball joint to one end of


pan screw of M3
A
Block of 4 x 4 x 6
Screw a M3 size tap in the center of it.
B
Pipe
Cut it in your necessary length.
And drill holes of about 2mm in diameter to
the both ends of it. These are air holes of solder.
Bolt of M3
Cut it in the length of about one centimeter.
SP-592

the tube and a length of threaded rod into the other

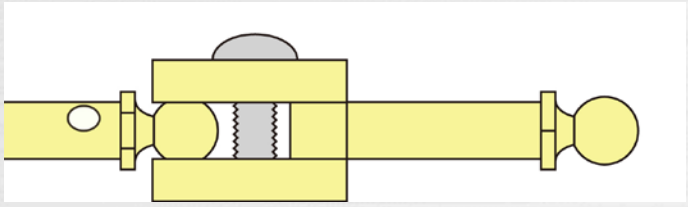


end. Now attach a square block to the end with the threaded rod and secure this with solder. Now we

can attach this to the “flatbar” and solder it in place

on Side “B” with this done you can now place the

ball into the joint and you have your first ball and



socket joint. Now you can repeat this and build your puppet.

In the Book, I wrote we cover many armature types and cover what useful tools there are for assembling the parts. If you can read Japanese, I

recommend you to buy our book. Even if Japanese is not understood, abundant photographs might be useful for you.

You will be able to buy this on the site of [Amazon.co.jp]

Interviews

Clark Schaffer Interview

By Darren Llewellyn

This month we have an interview with a prolific model maker who has worked on some of the biggest Sci-Fi and Fantasy movies over the past twenty years – Clark Schaffer, head of Schaffer Studios, and whose film credits include films such as Batman Forever Sphere and Iron Man 2

Hi and thanks for taking the time to do this interview with us.
My pleasure.

Clark would you mind telling us a bit about yourself?
I'm an art director and visual effects artist providing designs, models/ miniatures, and matte paintings for the film industry. I operate my own fx house, Schaffer Studios, and have recently began producing my own independent features.

Were you into building models as a kid or is this something that came about later on?
I was always building some kind of a model- either a kit or putting things together that I found around the house or in my dad's shop.

What kind of kits/models did you use to make?
Because of my interest in film and fantasy I was early on drawn to the old Aurora character kits- Batman, Planet of the Apes, the Witch and so on and of course once Star Wars came out I put together my share of space ships and sci-fi hardware.

What was your favourite kit as a child?
When I was growing up in the 70's the Aurora kits had become all but extinct and I would bug my folks to take me to the different hobby stores and toy stores and variety stores around town. It took forever, but I finally got my hands on the last Batman kit around at a place called toy world. I had a great time putting that together. I was 9 years old and I still have it in a box in need of some repairs. I also loved the MPC R2-D2. Oh- and I had this giant, must have been three feet long, Tyrannosaurus Rex that had glow in the dark teeth, and the Mr. Spock with the three headed serpent and General Ursus, and the AT-AT, and…

Are you a SCI-FI fan?
Not of every sci-fi story but certainly of the concept design and endless visual potential the genre offers.

Where you always a fan of the Sci-Fi / Fantasy genre or was that just something you got into through your professional work?
I've always enjoyed science fiction and I have to say that designers like Ron Cobb, Joe Johnston, Syd Mead and Ralph McQuarrie embedded in me an even greater appreciation for the genre.

What was your favourite film?
Hard question. As far as films that inspired me to want to make movies I'd have to include Star Wars, anything that Ray Harryhausen did, Alien, the Dark Crystal, Indiana Jones, Planet of the Apes, Back to the Future, Ghost Busters… I followed the work of ILM

and Rick Baker religiously.

How long have you worked as a professional model maker?
Just short of twenty years. –Wow!

What was the first project that you worked on?
I worked first on a mostly forgotten about film called Free Jack after which I worked at BOSS Film on Batman Returns. I worked on various parts of the huge Gotham City model, focusing most of my energy on building the ornate Gotham Cathedral.

How did you get started as a professional model builder?
Since I can remember I had always wanted to be a visual effects artist so I had always drawn or sculpted or built models with this in mind. As I got older, mostly right out of high school I began documenting all of my work and keeping a photo portfolio. Once I felt that I had a large enough body of work to represent my skills as a sculptor, painter, and model maker, I went from my home in the San Francisco bay Area and spent a few days interviewing with various FX companies. I met with BOSS Film, Fantasy II and Dream Quest, and they all said that if I were living in Hollywood I would be working. I moved to Hollywood two months later.

Do you prefer working on larger or smaller productions?
There's something to be said for the joy and satisfaction of sitting at your workbench and creating a personal piece with no one to answer to but yourself but you can't deny the thrill of having a $4 million budget of someone else's money and then orchestrating thirty model makers in creating a huge set or a fleet of spacecraft that you probably get to blow up that in turn thrills a worldwide audience and becomes a memorable piece

of movie history.

What kind of changes have you seen over your career?
Before CGI, entire sequences were created using elaborately engineered models including landscape, buildings, vehicles, and so on that, when properly filmed, would pass as the real thing, the audience never knowing they were looking at a model. Now it's been reduces to usually is a single model or two set in front of a green screen to be lost in the middle of digital confusion.
The giant model jobs are few and far between.

Do you think that using physical models in conjunction with CGI techniques will see a return to the model shops as we have seen a come back of stop motion?
I'm not certain that we will ever see a comeback of the model shop as it was from the mid 70's to the late 90's but film makers like Jon Favreau and Peter Jackson have certainly shown what can be achieved when mixing the best of both worlds and I think there is a returning interest in model making because of this.

Do you think there will come a time when physical models will not be needed in film production?
There may come a day when models are not used but it's my opinion that they will always be needed or at least should be needed. In this I mean that there are some things that a model can give us that CGI can't, or at least hasn't yet, just look at Avatar, a beautifully designed and executed CGI masterpiece (visually speaking) but still nothing more than an elaborate cartoon. It was always obvious that we were not in a real and tangible environment interacting with real beings. As for me personally, I am doing what I can to keep model making alive and well both in the established film industry and as I produce my own independent films.

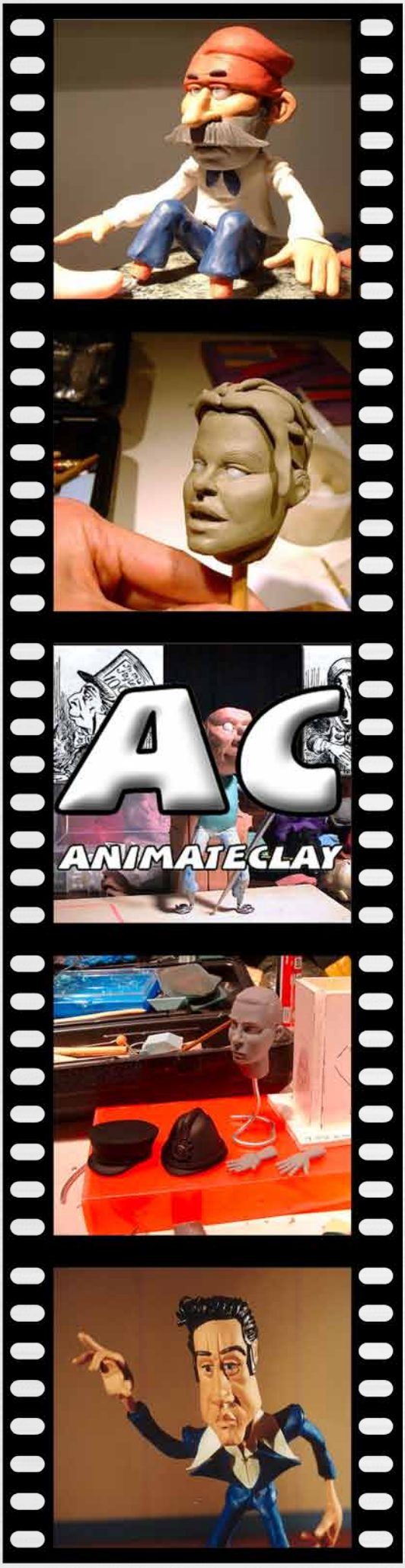
Do you often get to design and build models on projects?
I often do both but not necessarily for the same project. For instance I designed for Star Trek Generations at Paramount but never built a thing, and recently, on Iron Man II, we built the suits based on designs coming from the films art department. A few films I remember both designing and building for are Deep Blue Sea, Batman and Robin, and Mystery Men

Do you prefer to design or build the models?
I like it all. Each aspect of the creative process has its rewards. As a designer I love coming up with something new, something cool, something to make others go “ooooh”, and then there is something magical about taking plastic, resin, wood, bondo and paint and giving form and life to a two dimensional design. It’s all fun.

What project would you love to have worked on if you could have (from any time) and why would you have loved to work on?
The original Star Wars. It changed the way films were made. It took model making to its greatest place. It would have been fun to be part of that energy and creativity, to be part of the zany, hippie artist group that was assembled and to have had a hand in creating such a historical piece of film. Also anything that Jim Henson made. He died just before I got into the industry so, sadly, I never got to work with him.

What would you say was the most important skills needed to be a good model maker?
An artistic eye. A strong sense of form and design and spatial relationships. An understanding of mechanical functionality and grasp of engineering. A familiarity of shop tools and materials. Sculpting and mold making. Painting and airbrushing. The joy of creating and the imagination and magical wonderment of a child.

Well Thank you for your time, and we wish you well in your future endeavours



ScratchBuild

Pro Sets on a Budget

By Gilbert Gamra.

When it comes to building sets for Stop motion animation, you have to be very selective in how you place your objects and how you construct the actual set. The set itself plays a huge role in how smoothly your puppets can be animated. Stop motion puppets are very complicated things to make. Puppets require an armature, which is an internal skeleton of the puppet. The armature usually has very limited movement and this gets in the way of getting the shot you want when animating. So when animating, you will want to have full control of your puppet from every angle, or else the puppets already limited movement will be even more limited due to the fact that the human body can only assume so many positions, just like the puppets. So your best bet would be to make the set in parts or sections, making one solid set with no detachable parts are animation suicide.

Start out first with the sketches of the set, it doesn't have to be detailed, just enough for you to build off of, then once your rough sketches are finished and on hand, and you have a solid idea of what you want your set to look like. You need to decide what materials you will be using to make the buildings or geographical features, now you are ready to begin constructing the set. Start out with the surface you will be constructing the set upon, a good surface to make it on is a piece of foam or cardboard or even a

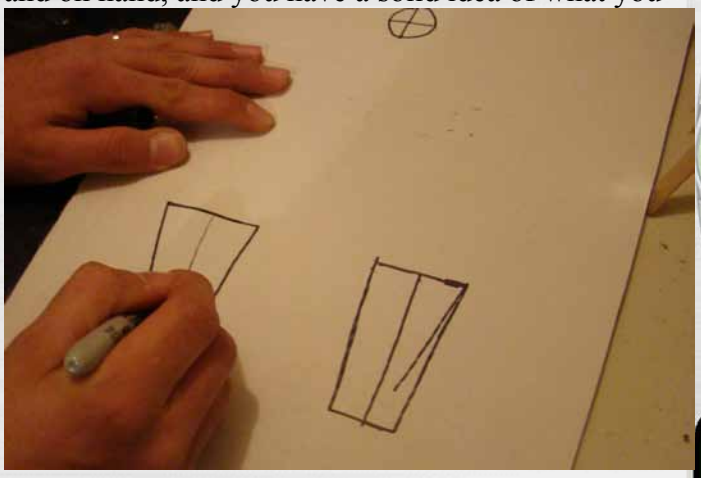
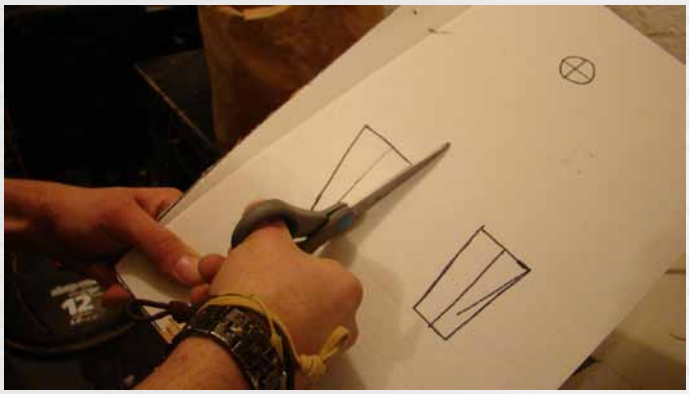


table.

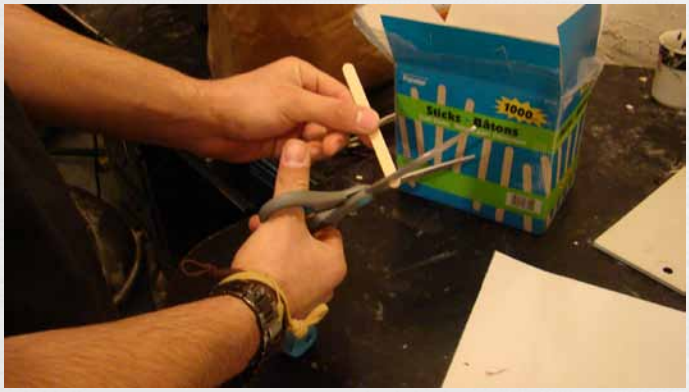
The next step is to map out where buildings or objects will be placed, then decide where the puppets will be walking or moving or doing simple actions, this is the part of the set you will want to make fully accessible from all angles. This can be done by putting hinges on the walls or backgrounds so that you can swing them open or fold them down, manipulate the puppet, close it back up to capture the frame. Many professional sets have trap doors that the animator can come up through, move the puppet, and than vanish quickly from the set to take the next frame.

Having objects on the set, such as tables or cabinets can really get in your way, a way to avoid this is to have everything on the set magnetically attached to the walls or floors, so that you can move an object in your way for animating and than be able to replace it before taking the next frame. You can achieve this by having thin sheets of magnetic material cut in the shape of the objects underside and glued under the floor of the set and also on the bottom of the object so the object will stick back onto the set firmly where it was before. Objects on the set don't always have to be moved though, but if they do then there are many other ways to get around this problem.

In the haunted house set pictured, a touch of surrealism is present, this style was created by simply making the shapes asymmetrical. To create the set I started off with the walls of the house drawing them out on cardboard with a marker and



then cut the shape out. To add some strength to it



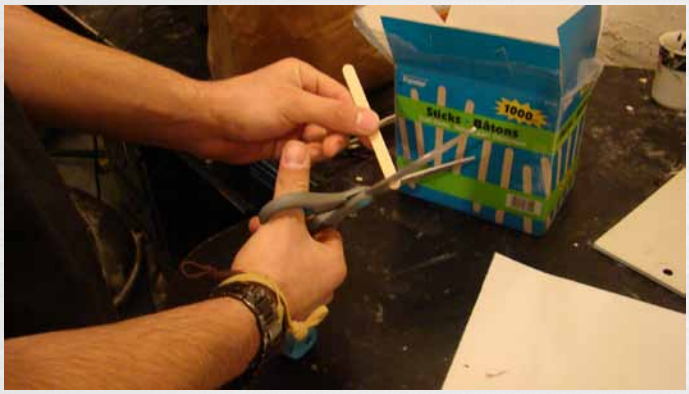
I attached popsicle sticks, that have been modified to look like old rotten wood by painting them,

were glued onto the cardboard and trimmed to fit

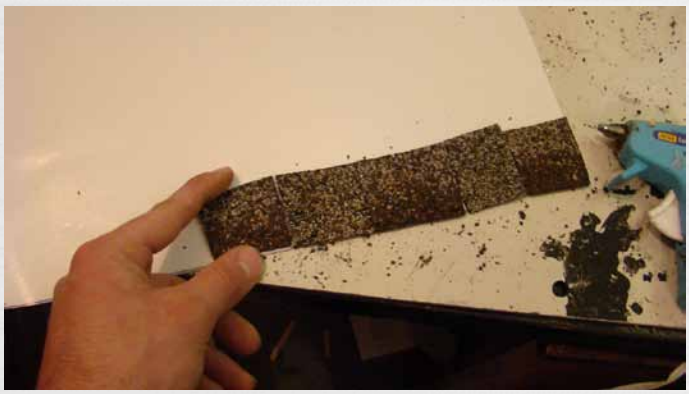
the shape of the wall correctly. The "glass" for the

windows was created using thin plastic to get the green tint for the windows. A soda bottle was cut into squares and glued behind the window frame, the whole structure is then held together by a wooden

on a piece of foam that will eventually be carved and covered with artificial grass to make a lawn for



the house. The stairs for the front porch will later be

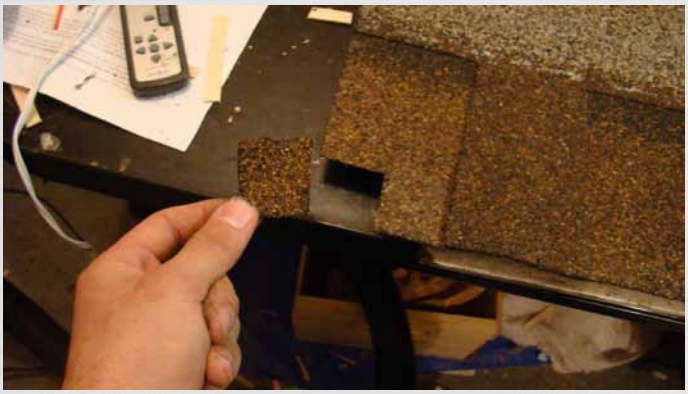


frame made from craft sticks, and is then put to sit

made that lead up to the house.

Let's Create Clay and Puppet Animation!
by Shigeru Okada, Tetsu Kawamura, Masakazu Kobayashi & Keita Funamoto
Adobe Premiere Pro・After Effectsで
クレイアニメ&人形アニメを作ろう!
Available In Japanese Only
http://i99.jp/
ISBN-13: 983-4-88337-679-7

While building any set, you will run into many



problems, but with enough brain power and creativity, any problem can be compensated in a unique way, whether its covering a crack in a wall with a picture frame, or altering the sets lighting to make a bad paintjob look reasonable. With this in mind the concept of building a professional looking set without breaking your bank isn't impossible. Pretty much anything that you see about can be used with a little imagination every day objects can take on a new life. Remember you're the creator of your own little world that you can shape and model and touch, that's what makes the whole process worth while and amazing.

Build Project

Making an Alien Puppet

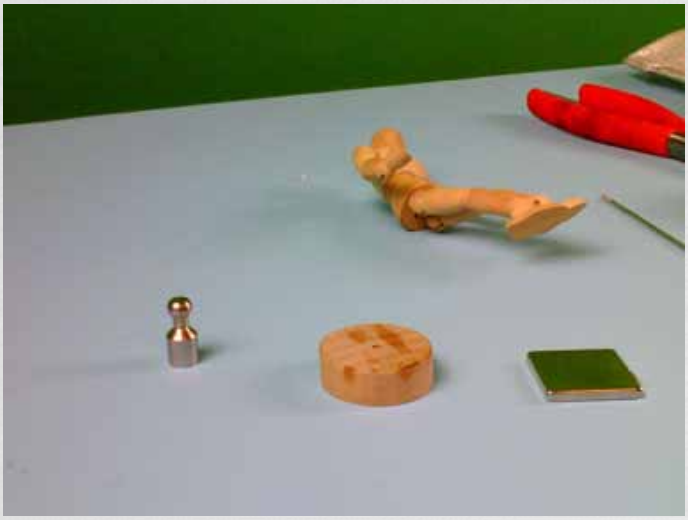
By AutOmatIc

In this tutorial I'll be explaining and demonstrating the methods that I use to create and sculpt my stopmotion/claymation puppets and demonstrate with an alien puppet I made, showing the overall basic processes used for people like me who aren't professionals and don't have thousands of dollars and massive amounts of people helping you. Ok let's get started!

These are the basic tools and materials I used to put this puppet together (minus the arm armatures) you can find these at most hobby stores. A hot glue gun, soft toy eyes, wireform mesh, wooden figure (only base used), wire, wire cutters, pliers, magnifying glass multi-tool (for pieces), two 1"x1" rare earth magnets, grey and black oil-based clay, fabric foam, sculpting tools (whichever are your favorites), scissors, rubber gloves (nitrile or latex doesn't matter as long as they're not textured).

I always like to start with a concept sketch, I believe this is very important as it allows you to have a

reference on paper to look at while transforming the idea in your head into a three dimensional object. Now to start building the puppet! The first thing we are going to build is the body, take just



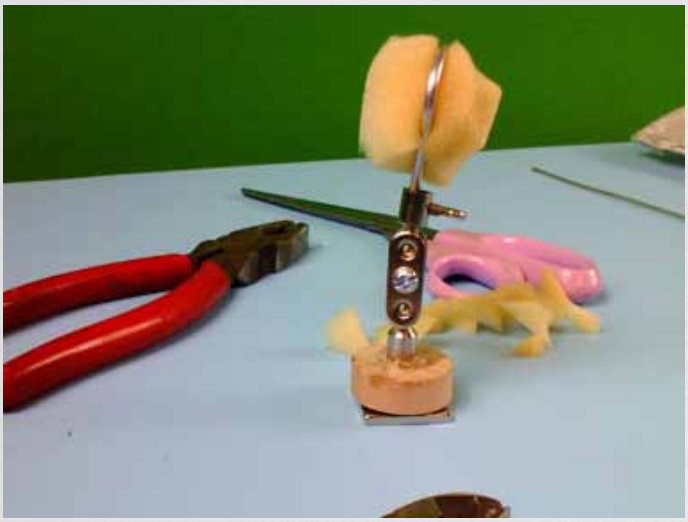
the round wooden base off of the figure and one of the magnets along with the piece shown taken from

the magnifying glass contraption, then hot glue the magnet to one side and the metal piece to the other side of the base. Next attach the side plates and the other metal pieces with the set screw together like so.

The next part of the puppet we are building is the head, I start with a small length of wire cut it and

then bend into a round shape to form the head. Insert the round wire into the top piece of the body and tighten the set screw until it won't move (not too

tight though or you'll damage the wire). Here we take the piece of fabric foam, which doesn't have to be perfect, and place it in the center of the round wire. Trim the foam down to a shape you're happy with.



Cut a rough square from the wireform mesh with your wire cutters, Bend the wire mesh around

the head and fold it in a few places then squish it together on the backside. Liberally 'weld' it together in the back and around the bottom of the mesh using

the hot glue gun. To place the eye on the head we

first make an indention with your thumb or whatever device you want to use in the place on the "head" you want the eye to be, and then trim the excess off of the stem from the backside of the eye. You can now hot glue the eye in place however it suits you.

At this point, you can see our alien is coming along nicely and we have a good base to work with. I have taken the scratch built ball-and-socket arms that I made and soldered them to the middle part

of the base, and then wrapped wire around them and hot glued the wire to help make it a bit more solid. If you want to learn how to build the ball-and-socket arms from scratch you can visit my you tube channel.

Though, if you want to just use a twisted wire for the arms that's cool too, but they won't give you quite as smooth a movement and you will most likely squish the clay more than you would with the ball-and-socket joints. But like anything creative, it is inevitably up to you to find what works best for you.

Ok, now comes the fun part, sculpting. For this puppet there are only two colors I'll be using grey and black, so it should flow pretty quickly, I like to work with only one color at a time because when you start to swap colours you can contaminate the other colours pretty easily. Using a separate pair of gloves for each color also helps to keep this from happening. I start sculpting the puppet by blocking the head in and then the base, next I roll the clay into long pointy pieces for the tentacles. These tentacles are then attached to the base and to the

arms like so...

Now I add the black clay and mold it around the body and arms folding, shaping, and squishing until

I get it where I think it looks pretty good. After that,

all that is left is to put on the finishing touches like, say a hair thingy, eyelids, and more detail...and voila! This alien is ready to be animated!
I hope you enjoyed this tutorial and look at the process that I use when modelling, and take from it what you will to develop your own styles and creative madnessHappy modelling!

CGI Sets – A Study

By Javier Leon

I am a computer graphics artist by trade and as a way of introducing my work, I will say that I started working in the videogames industry, working on titles like Commandos, Galleon and Worms and worked as marketing artist for SEGA. After that, I moved to the advertising industry working for clients like Lexus, BMW, Once, Sci-Fi Channel, Coca-Cola, British Gas, etc. I have also worked in the film industry on movies like Agora, Camino and His Majesty Minor, and directors like Alejandro Amenabar, Javier Fesser and Jean Jaques Annaud.

This CGI set is a project that I started long ago while I was still making videogames, I had always been a big fan of stop motion movies especially Wallace

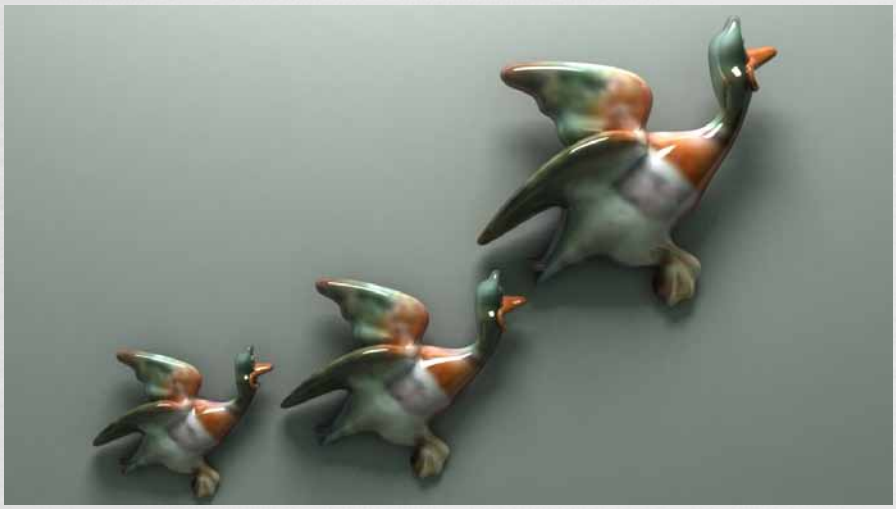
& Gromit, The Corpse Bride, and Coraline, my intention was to recreate that feel of a traditional stop motion set, but using CG.I. I believed that working in the same way with 3D software as you would in real life the result should look similar so studying the process and watching many. many times

all those movies was a great help.

The process itself was simple, I decided the geometry I would be working with was going to be small, In real life a set like mine would be probably something around 1 meter long and 40 cm tall. I think it is very important to have what size it would be in real life in mind so you keep detail to a certain scale and that does not change during the production.

A well-known stop motion animator gave me a very important tip, “we have fat fingers - don’t do any details that you couldn’t do with your fingers”.

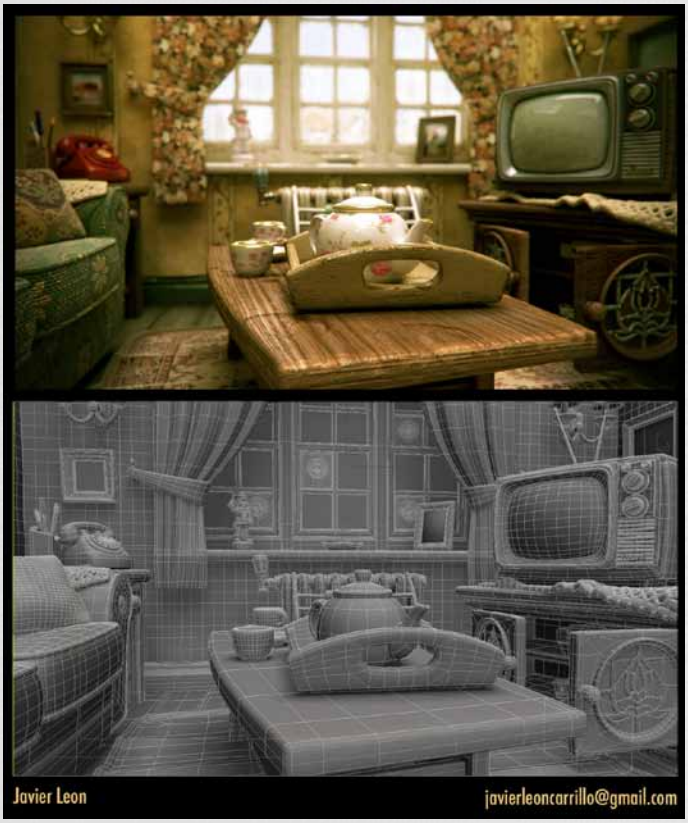
I started modelling the set with the walls, and then did the flooring, the walls were covered with paper that was not perfectly fitted. I remember it was important for me to get some canvas texture on the wallpaper. This was texture was achieved with a bump map and should be out of scale, so that will help to keep the set small. I also spent a lot of time on the flooring, I did not want a carpet covering everything, so I placed wood planks that looked old enough to keep a consistent look with the rest of the room.



Cloth textures were also important, especially for the sofa, cushions and

curtains. I made a 3s shader that behaved like velvet, so it gave a cloth feeling to the surfaces. Porcelain shaders were added as well, I wanted to have some items, like the figure on the window, the flying ducks and the tea set, made of porcelain.

At the end, the most time consuming part was the texturing. Everything should be aged enough, and it was important for everything to have a handmade look, aging objects takes a lot of observation you have to see how the rust works, where the stains are also when you are doing the shaders it is important too keep in mind the way things look. For example an object made of wood and then painted those materials have different properties in terms of reflectivity, so when you build the shading there has to be different layers that are built into the shader, much the same way as they are in reality. You first add the wood, and then paint with a shiny layer, then for that last touch of detail you can add some chips so we see the wood underneath

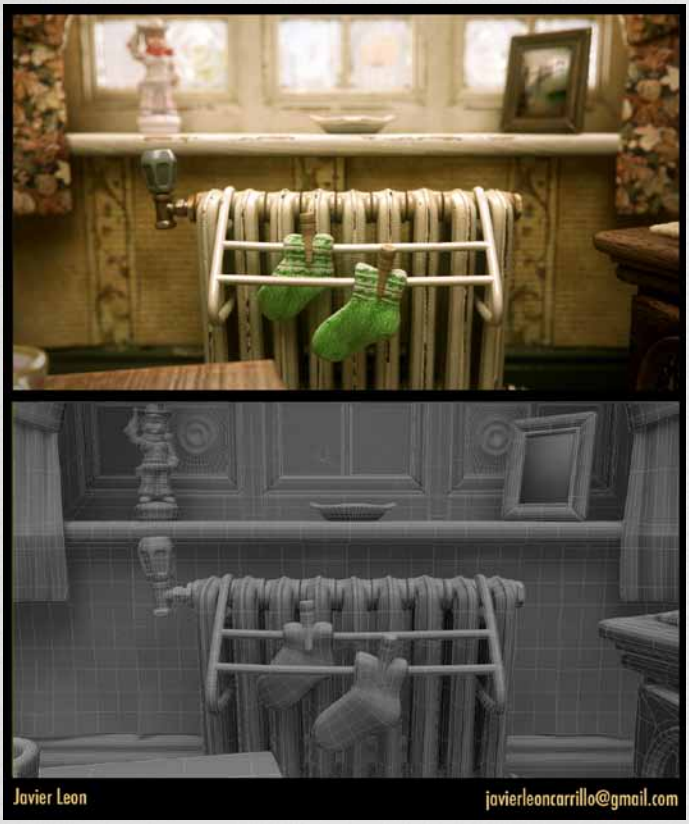


the paint, its important to add some wood lines to the painted layer. The final step is lighting and adding

depth of field. Lighting was done in the same way it would be for a set in any kind of studio, everything

is very diffused and there is no light coming from a particular direction. Depth of field helps a lot to add

scale to the scene. It really makes everything looking smaller.



Well, that is all about my CGI stop motion set, the next step? CGI puppets that look like real ones.

Resources

Material Suppliers

EMA Model Supplies Limited

Antenociti's Workshop

Alec Tiranti

Plastruct

RS Supplies

Maplin

Crafty Computer Paper

LED Light Suppliers

Glow Paint & Pigment

Expo Tools

EverGreen Scale Models

Animation Supplies

Hobbys

Bare Metal Foil

Model Suppliers

Comet Minatures

Gundam Mad

Hobby Link Japan

Frontier Models

Netmerchants
Federation Models

Cultman TV

Stevenson International

Antics

Mojo Resin

Monsters In Motion

Retro Resin

Forge World

Games Workshop

Labels, Decals, Plans, & Resources

Jbot Decals

Parts Pitt

Starship Builder

Dr Who Logos

Space 1999

JT Graphics

Star Trek Blue Prints

Star Trek Modelers Reference Guide

Steam Punk

Forums

SFM UK

Resin Illuminati

Model Manufactures

Monarch Models

Moebius Models

Revell

Airfix

Psycho Styrene

Pin UP